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EXAMINER
CRAVER, C

ART UNIT	PAPER NUMBER
2744	7

DATE MAILED: 01/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/880,648

Applicant(s)
Mendolia

Examiner
Charles Craver

Group Art Unit
2744



☒ Responsive to communication(s) filed on Oct 28, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-13 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-13 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabe, U.S. Patent #5,832,079.

Regarding claims 1, 2, 8 and 10,

Rabe discloses a flip style cellular phone comprising:

a main housing (12);

a flip (16), pivotally mounted to the main housing by hinges (16H and 16H@, see also column 2 line 63 - column 3 line 1), the flip having a free end remote from the hinges;

a microphone (32) mounted in the main housing; and

an acoustic pipe or channel (26) extending from the free end of the flip to the hinged end to carry sound from said free end to said hinged end, wherein said channel has a sound inlet (24) at the free end of the flip, and wherein said channel partly extends along one of the peripheral edges of the flip (see figure 2 and element 28). Said channel or pipe is in acoustic communication with said microphone (see abstract), transmitting sound from the inlet to the microphone.

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Rabe does not, however, expressly disclose that the acoustic channel extends entirely along one of the peripheral edges of the flip.

However, Rabe does disclose that the cavity can be made in "other shapes and types" (column 3 lines 44-47), including but not limited to conic section-shaped cavities. As would be obvious to one skilled in the art, a right triangle-shaped cavity extending from the hollow hinge to the sound inlet would extend entirely along a peripheral edge of the flip. It would have been obvious to one skilled in the art at the time the invention was made to incorporate such a cavity shape, as such a cavity would not have parted from the scope of the invention of Rabe.

Regarding claims 3 and 11, Rabe discloses a hollow hinge (16H@) connecting the acoustic channel to the microphone (column 3 lines 31-35).

Regarding claim 4, Rabe discloses an acoustic pipe providing a single acoustic pathway from the free end to the hinged end of the flip (see figure 2).

Further regarding claims 5, 9 and 12, Rabe disclosed above that the acoustic channel can be of "other shapes and types" (column 3 lines 44-47), which could construe an acoustic channel occupying the entire inside volume of the flip. An acoustic channel which occupies the entire inside volume of the flip, for example, would extend along the entire peripheral edge of the flip, as taught by claims 5 and 12, and would further be formed in the peripheral edge of the flip as taught by claim 9 of the present invention. Such a shape can be construed as anticipated by Rabe.

Regarding claim 6, Rabe disclosed above that said acoustic channel is in communication with said microphone.

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Regarding claims 7 and 13, Rabe discloses one or more hollow hinge connections separably connectable acoustically to the acoustic channel (column 5 lines 31-40). Two hinge connections, for example, would offer two acoustic paths to transmit sound to the microphone. Further, Rabe discloses that the "microphone may be mounted in any convenient place within the radiophone unit by merely repositioning and/or extending the interconnecting acoustic path." (column 5 lines 4-6) Thus the microphone could be placed closer to one acoustic hinge opening than another of the at least one hinge pins, making one of the aforementioned two acoustic paths of a differing length than the other.

Response to Arguments

1. Applicant's arguments filed October 28, 1999 have been fully considered but they are not persuasive.

In response to applicant's arguments regarding Rabe:

Applicant states that Rabe does not disclose an acoustic pipe. However, the acoustic channel disclosed by Rabe is read by the examiner as a pipe. Further, applicant defines an acoustic pipe as "a hollow sound carrying channel (see specification page 2 lines 2-3)" and "a hollow conduit that leads from the free end of the flip to the hinged end... (page 3 lines 18-19)." Although Rabe does not disclose a pipe of circular cross section, like the preferred embodiment of applicant, applicant further defines an acoustic pipe as having "other cross-sectional shapes [that] are also possible as equivalents (see specification page 4 lines 21-22)", and thus broadens the

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interpretation of an 'acoustic pipe.' Thus the phrase 'acoustic pipe' is read according to applicants definition, that is a hollow sound carrying channel of various cross-sectional types, that leads from the free end of the flip to the hinged end, which is met by Rabe.

Applicant further argues that Rabe does not disclose that said cavity or pipe is made to extend along the entire edge of the flip, and that examiner provides no motivation to modify Rabe to create such a channel. Examiner has stated above in the rejection of claim 1 that it would have been obvious to modify Rabe to do so. As applicant stated in arguments, "the obvious standard requires that the Examiner can only modify or combine the art when there is some teaching, suggestion or motivation to do so found in the references themselves or in the knowledge generally available in the art." (emphasis added) See arguments page 2 lines 18-21. The teaching would be the disclosure of Rabe that a cone shaped channel may be used (see Rabe col 3 lines 44-47), and also the fact that, as it is generally well known in the art, a cone may be made of a right triangle cross section, which would extend along the entire edge of the flip.

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

3. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-9051, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:

(703) 305-9051 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Craver whose telephone number is (703) 305-3965.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached on (703) 305-4778.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



C. Craver
December 20, 1999

CHARLES CRAVER
PATENT EXAMINER



DWAYNE D. BOST
SUPERVISORY PATENT EXAMINER
GROUP 2700